

## CLAIMS

1. A data processing system (20) comprising:
  - a unit (29) producing data elements;
  - data processing means (21) for processing data elements;
  - a first database (22) with at least part of its records containing the name information of a subscriber of a telecommunications system and the subscriber's address in the telecommunications system; and
  - interface means (26) containing output means (27) for outputting information to the user and input means (28) for receiving as input information from the user;

**characterized** in that

  - said output means (27) are arranged to output to the user at least a part of the content of a data element and at least one selection option for selecting the name information of a subscriber for attaching person-based metadata to the data element;
  - said input means (28) are arranged to receive as input from the user said selection of a subscriber's name information;
  - said data processing means (21) are, in response to the name selection by the user, arranged to fetch the subscriber address related to the selected name information from the first database; and to attach to the data element metadata that contains the fetched subscriber address.
2. A data processing system as claimed in claim 1, **characterized** in that said output means (27) are arranged to output a selection view that contains at least a part of the name information in the first database.
3. A data processing system as claimed in claim 1 or 2, **characterized** in that said system also comprises a database system for storing data elements, the database system comprising a server (53) and a second database (51).
4. A data processing system as claimed in claim 3, **characterized** in that said server (53) is arranged to receive a fetch request for a data element from a computer (56) connected to the server; and to check the access right to the data element on the basis of the subscriber address attached to the fetch request.
5. A data processing system as claimed in claim 4, **characterized** in that

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said output means (27) are also arranged to provide the user with the option of attaching to the data element an additional definition controlling its access right;

said input means (28) are arranged to receive as input from the user said additional definition;

said data processing means (21) are arranged to attach said additional definition to the data element.

6. A data processing system as claimed in claim 4, **characterized** in that

said output means (27) are also arranged to provide the user with the option of attaching to the data element an additional definition controlling a function to be implemented during its storage;

said input means (28) are arranged to receive as input from the user said additional definition;

said data processing means (21) are arranged to attach said additional definition to the data element.

7. A data processing system as claimed in claim 6, **characterized** in that the server (53) is arranged to receive said additional definition; and, in response to the received additional definition, to execute during storage the function defined by the additional definition.

8. A data processing system as claimed in claim 7, **characterized** in that said function includes transmitting the data element to the subscriber identified by the address in the person-based metadata.

9. A data processing system as claimed in claim 1, **characterized** in that the system also comprises a clock unit (81) for defining the generation time of the data element, the clock unit (81) being also arranged to

attach to the data element metadata containing a data series identifier;

measure a time interval between two data elements;

compare the time interval with a predefined reference value;

attach, in response to undershooting the reference value, to the later data element the same identifier as to the earlier data element; and

attach, in response to exceeding the reference value, to the later data element a different identifier than to the earlier data element.

10. A data processing system as claimed in claim 1, **characterized** in that the system also comprises a calendar unit (82), the calendar unit being also arranged to:

detect the generation time of the data element;

fetch a calendar event corresponding to the generation time;

attach to the data element metadata containing said calendar event.

11. A data processing system as claimed in claim 1, **characterized** in that the system also comprises a positioning unit (83), the positioning unit being also arranged to:

generate location information on a system element containing the positioning unit at the generation time of the data element;

attach to the data element metadata containing said location information.

12. A data processing system as claimed in any one of the preceding claims, **characterized** in that said data elements contain image data.

13. A mobile station (20) comprising:

a unit (29) producing data elements;

data processing means (21) for processing data elements;

a first database (22) with at least part of its records containing name information of a subscriber of a telecommunications system and the subscriber's address in the telecommunications system; and

interface means (26) containing output means (27) for outputting information to the user and input means (28) for receiving as input information from the user;

**characterized** in that

said output means (27) are arranged to output to the user at least a part of the content of a data element and at least one selection option for selecting the name information of a subscriber for attaching person-based metadata to the data element;

said input means (28) are arranged to receive as input from the user said selection of a subscriber's name information;

said data processing means (21) are, in response to the name selection by the user, arranged to fetch the subscriber address related to the selected name information from the first database, and to attach to the data element metadata that contains the fetched subscriber address.

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14. A method for data processing in a system, in which a data element is generated, and records are maintained in a first database, and at least part of the records of the first database comprise name information of a subscriber of a telecommunications system and the subscriber's address in the telecommunications system,

**characterized by**

outputting (42) to the user with at least a part of the content of the data element and the option of selecting at least one subscriber's name information for attaching person-based metadata to the data element;

receiving as input (43) from the user said subscriber's name information selection;

fetching (44), in response to the user's selection, the address of the subscriber related to the selected name information from the first database; and

attaching (45) to the data element metadata that contains the fetched subscriber address.

15. A method as claimed in claim 14, **characterized by** providing a selection view containing at least a part of the name information in the first database.

16. A method as claimed in claim 14 or 15, **characterized by** storing (104) data elements into a database system connected to the system, the database system comprising a server and database.

17. A method as claimed in claim 16, **characterized by** receiving (101) a data element fetch request from a computer connected to the server; and checking the access right to the data element on the basis of the subscriber address attached to the fetch request.

18. A method as claimed in claim 17, **characterized by** also providing the user with the option of attaching to the data element an additional definition controlling its access right;

receiving (95) as input from the user said additional definition;

attaching (96) said additional definition to the data element.

19. A method as claimed in claim 17, **characterized by** also providing the user with the option of attaching to the data element an additional definition controlling a function executed during the storage of the data element;

receiving as input (95) from the user said additional definition;

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attaching (96) said additional definition to the data element.

20. A method as claimed in claim 19, **characterized** by receiving (101) to the server said additional definition; and, in response to the received additional definition, executing (106) said function during storage.

21. A method as claimed in claim 20, **characterized** by executing (106) said function by transmitting the data element to the subscriber identified by the address contained in the person-based metadata.

22. A method as claimed in claim 14, **characterized** by defining the generation time of the data element;  
attaching to the data element metadata containing an identifier that identifies a data series to which the data element belongs;  
measuring a time interval between two data elements;  
comparing the time interval with a predefined reference value;  
attaching, in response to undershooting the reference value, to the later data element the same identifier as to the earlier data element; and  
attaching, in response to exceeding the reference value, to the later data element a different identifier than to the earlier data element.

23. A method as claimed in claim 1, **characterized** by detecting the generation time of the data element;  
fetching a calendar event corresponding to the generation time;  
attaching to the data element metadata containing said calendar event.

24. A method as claimed in claim 14, **characterized** by generating the location information of the system element that generated the data element at the generation time of the data element;  
attaching to the data element metadata containing said location information.

25. A software product of a computer, **characterized** in that executing commands makes the computer implement the steps of the method according to any one of claims 14 to 24.

26. A network element (20) of a telecommunications system, the network element comprising:

first interface means (23) for receiving data elements;  
user interface means (26) for outputting information to the user and receiving as input information from the user;

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a first database (22) with at least part of its records containing the name information of a subscriber of a telecommunications system and the subscriber's address in the telecommunications system;

second interface means (26) containing output means (27) for outputting information to the user and input means (28) for receiving as input information from the user;

**characterized** in that

said input means (27) are arranged to output to the user at least a part of the content of a data element and at least one selection option for selecting the name information of a subscriber for attaching metadata to the data element;

said input means (28) are arranged to receive as input from the user said selection of a subscriber's name information;

said data processing means (21) are, in response to the name selection by the user, arranged to fetch the subscriber address related to the selected name information from the first database; and to attach to the data element metadata that contains the fetched subscriber address.

27. A database system of a telecommunications system, the database system comprising a database (62) and a server (60), **characterized** in that

the server (60) comprises first interface means (63, 64) for receiving a data element and person-based contentual metadata attached to the data element, the contentual metadata containing the address of at least one subscriber in a specific telecommunications system.

28. A database system as claimed in claim 27, **characterized** in that the server (60) comprises data processing means (61) arranged to

check whether an additional definition controlling the access right of the data element is attached to the received data element;

execute said function in response to the fact that an additional definition is attached.

29. A database system as claimed in claim 27, **characterized** in that the server (60) comprises data processing means (61) arranged to

check whether an additional definition controlling the access right of the data element is attached to the received data element;

control the access of the data element in response to the fact that an additional definition is attached.

30. A database system as claimed in claim 27, **characterized** in that the first interface means (63, 64) are arranged to

receive (120) a first data element;

receive (120) a second data element; and

the data processing means (61) are arranged to

read first metadata attached to the first data element and second metadata attached to the second data element;

check whether the first and second metadata simultaneously meet a specific combination rule;

combine, in response to the first and second metadata simultaneously meeting the specific combination rule, the first and second data element into a data set to be processed as one entity.

31. A database system as claimed in claim 30, **characterized** in that the combination rule of the data processing means is a functionality stored in the data processing means, and the data processing means are arranged to check the combination rule in response to receiving data elements.

32. A database system as claimed in claim 30, **characterized** in that said interface means are arranged to receive the combination rule from the user.